PSYCKES

Quality Assurance Reporting Requirements (QARR) Improvement Measures

February 2020

Technical Specifications



No Diabetes Monitoring for People with Diabetes and Schizophrenia

Description:

The percentage of Medicaid enrollees/members 18-64 without an LDL-C test and an HbA1c test during the past 13 months among enrollees/members with diagnosis of schizophrenia and diabetes as of the PSYCKES report date.

Eligible Population:

Age: 18 to 64

Inclusion Criteria: Medicaid enrollees/members with a diagnosis of schizophrenia in the past

year and a diagnosis of diabetes in the past 2 years.

Enrollees/members with continuous 11 month Medicaid eligibility, one year

prior to the PSYCKES report date (allowing for 1 month gap).

Exclusions: Dual Eligible (Medicare).

Specification:

Numerator: Enrollees/members (from the eligible population) who did not have an

HbA1c test (table 1) and an LDL-C test (table 2) in the past 13 months.

Denominator: Enrollees from the eligible population who have received one or more

services from an inpatient/ER or outpatient behavioral health provider in past 9 months or enrolled in a Health Home or Care Management agency prior to

the PSYCKES report date.

Definition of Diabetes: One or more occurrence(s) of a drug in the group "Antidiabetic Medications"

(Table 7 in Appendix) during the measurement year and the year prior to it. These drugs belong to the antidiabetic drug group created by Medispan.

OR

Any two or more diagnoses of diabetes (primary or secondary) in an outpatient setting, or any 1 diagnosis in an inpatient setting, during the measurement year and the year prior to it. For qualifying diagnosis of diabetes see Table 6 in

Appendix.

Note: The specifications for this measure are based on "HEDIS Tech Specs for Physician Measurement 2016".

Table 1: Procedure Codes for HbA1c

Procedure Code	Procedure Code Description
83037	HEMOGLOBIN; GLYCOSYLATED (A1C) BY DEVICE CLEARED BY FDA FOR HOME USE
3045F	MOST RECENT HEMOGLOBIN A1C (HBA1C) LEVEL 7.0-9.0% (DM)
3046F	MOST RECENT HEMOGLOBIN A1C LEVEL > 9.0% (DM)
83036	HEMOGLOBIN; GLYCOSYLATED (A1C)
3044F	MOST RECENT HEMOGLOBIN A1C (HBA1C) LEVEL LESS THAN 7.0% (DM)

Table 2: Procedure Codes for LDL-C

Procedure Code	Procedure Code Description
80061	BLOOD TEST, LIPIDS (CHOLESTEROL AND TRIGLYCERIDES)
83700	LIPOPROTEIN, BLOOD; ELECTROPHORETIC SEPARATION AND QUANTITATION
83701	LIPOPROTEIN, BLOOD; HIGH RESOLUTION FRACTIONATION AND QUANTITATION OF LIPOPROTEINS INCLUDING LIPOPROTEIN SUBCLASSES WHEN PERFORMED (EG, ELECTROPHORESIS, ULTRACENTRIFUGATION)
83721	LIPOPROTEIN, DIRECT MEASUREMENT; DIRECT MEASUREMENT, LDL CHOLESTEROL
83704	LIPOPROTEIN, BLOOD; QUANTITATION OF LIPOPROTEIN PARTICLE NUMBERS AND LIPOPROTEIN PARTICLE SUBCLASSES (EG, BY NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY
3048F	MOST RECENT LDL-C 100 MG/DL (DM)
3049F	MOST RECENT LDL-C 100-129 MG/DL (DM)
3050F	MOST RECENT LDL-C GREATER THAN OR EQUAL TO 130 MG/DL (CAD) (DM)

No Diabetes Screening for People with Schizophrenia or Bipolar Disorder who are on an Antipsychotic

Description:

The percentage of Medicaid enrollees/members 18-64 without a glucose or HbA1c test during the past 13 months among enrollees/members with a diagnosis of schizophrenia or bipolar(Tables 8 and 9 in Appendix), as of the PSYCKES report date.

Eligible Population:

Age: 18 to 64

Inclusion Criteria: Medicaid enrollees/members with a diagnosis of schizophrenia or bipolar

and on an antipsychotic medication or antipsychotic long acting injectable

(table 4), during the past year.

Enrollees/members with continuous 11 month Medicaid eligibility, one year

prior to the PSYCKES report date (allowing for 1 month gap).

Exclusions: Dual Eligible (Medicare).

Enrollees/members with a diagnosis of diabetes (Appendix Table 6)

Specification:

Numerator: Enrollees/members (from the eligible population) who did not have an

HbA1c test (table 1) or a glucose test (table 3) during the past 13 months.

Denominator: Enrollees from the eligible population who have received one or more

services from an inpatient/ER or outpatient behavioral health provider in past 9 months or enrolled in a Health Home or Care Management agency prior to

the PSYCKES report date.

Note: For diagnosis of schizophrenia see Table 8 in Appendix and for diagnosis of bipolar see Table 9 in Appendix.

The specifications for this measure are based on "HEDIS Tech Specs for Physician Measurement 2016".

Table 3: Procedure Codes for Glucose Tests

Procedure Code	Procedure Code Description
82951	GLUCOSE; TOLERANCE TEST (GTT), THREE SPECIMENS (INCLUDES GLUCOSE)
82950	GLUCOSE; POST GLUCOSE DOSE (INCLUDES GLUCOSE)
80047	BASIC METABOLIC PANEL (CALCIUM, IONIZED)
80050	GENERAL HEALTH PANEL
82947	GLUCOSE; QUANTITATIVE, BLOOD (EXCEPT REAGENT STRIP)
80048	BASIC METABOLIC PANEL (CALCIUM, TOTAL)
80069	RENAL FUNCTION PANEL
80053	COMPREHENSIVE METABOLIC PANEL

Table 4: Procedure Codes for Long acting AP injectable

Procedure Code	Procedure Code Description
J0401	Injection, aripiprazole, extended release, 1mg
J1631	Injection, haloperidol decanoate, per 50 mg
J2358	Injection, olanzapine, long-acting, 1mg
J2426	Injection, paliperidone palmitate extended release, 1 mg
J2680	Injection, fluphenazine decanoate, up to 25 mg
J2794	Injection, risperidone, long acting, 0.5mg

No Metabolic Monitoring for Children and Adolescents on Antipsychotics

Description:

The percentage of Medicaid enrollees/members 17 years of age or under with at least 2 antipsychotic pickups or 1 antipsychotic injectable (table 4) without metabolic testing during the past 13 months, as of the PSYCKES report date.

Eligible Population:

Age: 1 to 17

Inclusion Criteria: Medicaid enrollees/members with at least 2 antipsychotic medication

pickups, during the past year.

Enrollees/members with continuous 11 month Medicaid eligibility, one year

prior to the PSYCKES report date (allowing for 1 month gap).

Exclusions: Dual Eligible (Medicare).

Specification:

Numerator: Enrollees/members (from the eligible population) who did not have a blood

glucose test (table 3) or HbA1c (table 1) AND at least one test for LDL-C

(table 2) or cholesterol (table 5) during the past 13 months.

Denominator: Enrollees from the eligible population who have received one or more

services from an inpatient/ER or outpatient behavioral health provider in past 9 months or enrolled in a Health Home or Care Management agency prior to

the PSYCKES report date.

Note: The specifications for this measure are based on "HEDIS Tech Specs for Physician Measurement 2016".

Table 5: Procedure Codes for Cholesterol Tests

Procedure Code	Procedure Code Description
84478	TRIGLYCERIDES
82465	CHOLESTEROL, SERUM OR WHOLE BLOOD, TOTAL
83718	LIPOPROTEIN, DIRECT MEASUREMENT; HIGH DENSITY CHOLESTEROL (HDL CHOLESTEROL)

Adherence to Antipsychotic Medications for Individuals with Schizophrenia (< 80%)

Description:

The percentage of Medicaid enrollees/members ages 18 to 64 with a diagnosis of schizophrenia or schizoaffective disorder (see Table 8 in Appendix for list of diagnoses) who remained on an antipsychotic for less than 80 percent of the treatment period.

Eligible Population:

Age: 18 – 64 years as of PSYCKES report date.

Inclusion Criteria: Medicaid enrollees with diagnosis of schizophrenia or schizoaffective

disorder in the year prior to the PSYCKES report date and had picked up at least one antipsychotic during the intake period (first 9 months of the 12

months prior to the PSYCKES report date).

Enrollees with continuous Medicaid eligibility the year prior to the PSYCKES

report date (No more than one gap of 45 days).

Enrollees had at least two antipsychotic medication dispensing events in the

year prior to the PSYCKES report date.

Exclusion Criteria: Dual Eligible (Medicare).

Enrollees with a primary diagnosis of dementia in the year prior to the

PSYCKES report date.

Definitions:

IPSD: Index prescription start date (IPSD) is the earliest prescription dispensing

date for any antipsychotic medication during the first 9 months of the 12

months prior to the PSYCKES report date.

Treatment Period: The period of time beginning on the IPSD through the PSYCKES report

date.

PDC: Proportion of days covered (PDC) is the total days covered by at least one

antipsychotic medication prescription (or inpatient days), divided by total

days in treatment period.

Calculation: Days covered for any antipsychotic prescriptions:

1. When antipsychotic medications are dispensed on the same day, use the

prescription with longest days of supply.

2. If multiple prescriptions for different medications are dispensed on

different days, only count each day once.

3. If multiple prescriptions for the same medications are dispensed on different days, for oral medication, sum the total days supply for this

medication; for injection, only count once for each day.

4. If an enrollee is covered with an antipsychotic medication within 50 days

of the report date, it is assumed the enrollee has antipsychotic medication coverage until the report date.

*Inpatient Days: Inpatient stays occurring during the treatment period are treated as days

with antipsychotic medication.

Specification:

Numerator: Number of enrollees/members (from the eligible population) whose PDC

(total days covered with an antipsychotic divided by total days in treatment

period) is less than 80 percent.

Denominator: Enrollees from the eligible population who have received one or more

services from an inpatient/ER or outpatient behavioral health provider in past 9 months or enrolled in a Health Home or Care Management agency prior to

the PSYCKES report date.

^{*}This indicator is based on the "Adherence to Antipsychotic Medications for Individuals with Schizophrenia", HEDIS 2013, Volume 2. Differences include: inverting the indicator by reporting the percent of enrollees with a PDC of less than 80% and treating inpatient days as days covered with antipsychotic medication.

Antidepressant Trial of less than 12 weeks for Individuals with Depression (Antidepressant < 12 weeks (Depression))

Description:

The percentage of Medicaid enrollees/members ages 18 to 64 with a primary or secondary diagnosis of depression (see Table 10 in Appendix for list of diagnoses) who were newly started on an antidepressant medication but did not remain on any antidepressant for a minimum of 12 weeks (84 days) in the year prior to PSYCKES report date.

Eligible Population:

Age: 18 – 64 years as of the PSYCKES report date.

Inclusion Criteria: Medicaid enrollees/members with a primary or secondary diagnosis of

major depression in the year prior to the PSYCKES report date and have no evidence of antidepressant medication in the 90 days prior to the first

antidepressant pick up in the measurement period.

Enrollees/members are continuously enrolled during the year prior to

PSYCKES report date (no more than one gap of 45 days).

Exclusion Criteria: Dual Eligible (Medicare).

Enrollees with antidepressant treatment 90 days prior to the IPSD.

Definitions:

IESD: Index Episode Start Date (IESD) is the earliest encounter during the year

prior to the PSYCKES report date with any diagnosis of major depression and a 90-day Negative Medication History. For inpatient, the IESD is the

date of discharge.

IPSD: Index prescription start date (IPSD) is the earliest prescription dispensing

date for an antidepressant medication during the period of 30 days prior to

the IESD (inclusive) through 14 days after the IESD (inclusive).

Negative Medication

History:

A period of 90 days prior to the IPSD when the member had no

pharmacy claims for either new or refill prescriptions for an antidepressant

medication.

Specification:

Numerator*: Number of enrollees/members (from the eligible population) who had less

than 12 weeks (84 days) of continuous treatment with antidepressant

medication during the 114 day period following the IPSD (2).

If an enrollee is covered with an antidepressant medication within 50 days of the report date, it is assumed the enrollee has antidepressant medication

coverage until the report date.

Denominator: Enrollees from the eligible population who have received one or more

services from an inpatient or BH provider in the 9 months prior to the

PSYCKES report date.

*If an enrollee's/member's IPSD is within 114 days of the report date, we consider the enrollee/member to have continuous treatment with antidepressant medication.

Note: This indicator is based on Antidepressant Medication Management (AMM) from HEDIS 2013, volume 2. We inverted the indicator to report the percent of enrollees who had less than 12 weeks of antidepressant medication.

Use of multiple concurrent antipsychotics in children and adolescents.

Similar to current measure: Polypharmacy Indicators - Antipsychotic polypharmacy of two or more agents (2AP)

Description: The percentage of enrollees of ages 1 to 17 who were prescribed two or

more antipsychotic medications among enrollees prescribed any

antipsychotic medication.

Eligible Population:

Age: 1 - 17 years as of PSYCKES report date.

Inclusion Criteria: Medicaid enrollee who is prescribed an antipsychotic medication for greater

than 90 days.

Exclusion Criteria: Current Medicare enrollee (dual eligibility).

Event/Diagnosis: An enrollee is included in the eligible population if the enrollee has been

prescribed an antipsychotic medication for longer than 90 days* as of the

report date.

Specification:

Numerator: Enrollees (from the eligible population) prescribed two or more concurrent

antipsychotic medications during the previous 90 days or longer as of the

report date.

Denominator: Eligible Population

*Note: The algorithm measures time exposed to multiple agents and not the specific regimens. Individual agent trials are created, allowing for a possible 32 day gap between the last day with medication and the next pick-up date of the same agent (assuming less than perfect adherence and possible short inpatient stays). Polypharmacy trials are created by counting the number of agents available each day (constructed via the agent trials) and assigning corresponding start and end dates. A built-in allowance for polypharmacy trial gap of 15 days is permitted to allow for short periods of fewer medications, if enrollee returns to the same or higher status.

APPENDIX

Table 6: Diagnosis codes for Diabetes and Diabetes Exclusions

Diagnosis code	Diagnosis label	Diagnosis group	ICD version	KEYN UM
250	Diabetes mellitus	Diabetes	9	0
2500	Diabetes mellitus without mention of complication	Diabetes	9	0
25000	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled	Diabetes	9	1
25001	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled	Diabetes	9	1
25002	Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled	Diabetes	9	1
25003	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled	Diabetes	9	1
2501	Diabetes with ketoacidosis	Diabetes	9	0
25010	Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled	Diabetes	9	1
25011	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled	Diabetes	9	1
25012	Diabetes with ketoacidosis, type II or unspecified type, uncontrolled	Diabetes	9	1
25013	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled	Diabetes	9	1
2502	Diabetes mellitus with hyperosmolarity	Diabetes	9	0
25020	Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled	Diabetes	9	1
25021	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled	Diabetes	9	1
25022	Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled	Diabetes	9	1
25023	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled	Diabetes	9	1
2503	Diabetes with other coma	Diabetes	9	0
25030	Diabetes with other coma, type II or unspecified type, not stated as uncontrolled	Diabetes	9	1
25031	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled	Diabetes	9	1
25032	Diabetes with other coma, type II or unspecified type, uncontrolled	Diabetes	9	1
25033	Diabetes with other coma, type I [juvenile type], uncontrolled	Diabetes	9	1
2504	Diabetes with renal manifestations	Diabetes	9	0
25040	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled	Diabetes	9	1
25041	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	Diabetes	9	1
25042	Diabetes with renal manifestations, type II or unspecified type, uncontrolled	Diabetes	9	1
25043	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	Diabetes	9	1
2505	Diabetes with ophthalmic manifestations	Diabetes	9	0
25050	Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled	Diabetes	9	1
25051	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled	Diabetes	9	1

25052	Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled	Diabetes	9	1
25053	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled	Diabetes	9	1
2506	Diabetes with neurological manifestations	Diabetes	9	0
25060	Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled	Diabetes	9	1
25061	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled	Diabetes	9	1
25062	Diabetes with neurological manifestations, type II or unspecified type, uncontrolled	Diabetes	9	1
25063	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled	Diabetes	9	1
2507	Diabetes with peripheral circulatory disorders	Diabetes	9	0
25070	Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled	Diabetes	9	1
25071	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled	Diabetes	9	1
25072	Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled	Diabetes	9	1
25073	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled	Diabetes	9	1
2508	Diabetes with other specified manifestations	Diabetes	9	0
25080	Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled	Diabetes	9	1
25081	Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled	Diabetes	9	1
25082	Diabetes with other specified manifestations, type II or unspecified type, uncontrolled	Diabetes	9	1
25083	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled	Diabetes	9	1
2509	Diabetes with unspecified complication	Diabetes	9	0
25090	Diabetes with unspecified complication, type II or unspecified type, not stated as uncontrolled	Diabetes	9	1
25091	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled	Diabetes	9	1
25092	Diabetes with unspecified complication, type II or unspecified type, uncontrolled	Diabetes	9	1
25093	Diabetes with unspecified complication, type I [juvenile type], uncontrolled	Diabetes	9	1
3572	Polyneuropathy in diabetes	Diabetes	9	1
3620	Diabetic retinopathy	Diabetes	9	0
36201	Background diabetic retinopathy	Diabetes	9	1
36202	Proliferative diabetic retinopathy	Diabetes	9	1
36203	Nonproliferative diabetic retinopathy NOS	Diabetes	9	1
36204	Mild nonproliferative diabetic retinopathy	Diabetes	9	1
36205	Moderate nonproliferative diabetic retinopathy	Diabetes	9	1
36206	Severe nonproliferative diabetic retinopathy	Diabetes	9	1
36207	Diabetic macular edema	Diabetes	9	1
36641	Diabetic cataract	Diabetes	9	1
6480	Diabetes mellitus complicating pregnancy, childbirth, or the puerperium	Diabetes	9	0
64800	Diabetes mellitus of mother, complicating pregnancy, childbirth, or the puerperium, unspecified as to episode of care or not applicable	Diabetes	9	1

64801	Diabetes mellitus of mother, complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition	Diabetes	9	1
64802	Diabetes mellitus of mother, complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication	Diabetes	9	1
64803	Diabetes mellitus of mother, complicating pregnancy, childbirth, or the puerperium, antepartum condition or complication	Diabetes	9	1
64804	Diabetes mellitus of mother, complicating pregnancy, childbirth, or the puerperium, postpartum condition or complication	Diabetes	9	1
E10	Type 1 diabetes mellitus	Diabetes	10	0
E101	Type1 diabetes mellitus with ketoacidosis	Diabetes	10	0
E1010	Type1 diabetes mellitus with ketoacidosis without coma	Diabetes	10	1
E1011	Type1 diabetes mellitus with ketoacidosis with coma	Diabetes	10	1
E102	Type1 diabetes mellitus with kidney complications	Diabetes	10	0
E1021	Type1 diabetes mellitus with diabetic nephropathy	Diabetes	10	1
E1022	Type1 diabetes mellitus with diabetic chronic kidney disease	Diabetes	10	1
E1029	Type1 diabetes mellitus with other diabetic kidney complication	Diabetes	10	1
E103	Type 1 diabetes mellitus with ophthalmic complications	Diabetes	10	0
E1031	Type 1 diabetes mellitus with unspecified diabetic retinopathy	Diabetes	10	0
E10311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diabetes	10	1
E10319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diabetes	10	1
E1032	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy	Diabetes	10	0
E10321	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diabetes	10	1
E10329	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1033	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy	Diabetes	10	0
E10331	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diabetes	10	1
E10339	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1034	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy	Diabetes	10	0
E10341	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diabetes	10	1
E10349	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1035	Type 1 diabetes mellitus with proliferative diabetic retinopathy	Diabetes	10	0
E10351	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diabetes	10	1
E10359	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1036	Type1 diabetes mellitus with diabetic cataract	Diabetes	10	1
E1039	Type 1 diabetes mellitus with other diabetic ophthalmic complication	Diabetes	10	1
E104	Type1 diabetes mellitus with neurological complications	Diabetes	10	0
E1040	Type1 diabetes mellitus with diabetic neuropathy, unspecified	Diabetes	10	1
E1041	Type 1 diabetes mellitus with diabetic mononeuropathy	Diabetes	10	1
E1042	Type 1 diabetes mellitus with diabetic polyneuropathy	Diabetes	10	1
E1043	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diabetes	10	1
E1044	Type1 diabetes mellitus with diabetic amyotrophy	Diabetes	10	1
E1049	Type1 diabetes mellitus with other diabetic neurological complication	Diabetes	10	1
E105	Type1 diabetes mellitus with circulatory complications	Diabetes	10	0

E1051	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diabetes	10	1
E1052	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diabetes	10	1
E1059	Type 1 diabetes mellitus with other circulatory complications	Diabetes	10	1
E106	Type 1 diabetes mellitus with other specified complications	Diabetes	10	0
E1061	Type 1 diabetes mellitus with diabetic arthropathy	Diabetes	10	0
E10610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	Diabetes	10	1
E10618	Type 1 diabetes mellitus with other diabetic arthropathy	Diabetes	10	1
E1062	Type 1 diabetes mellitus with skin complications	Diabetes	10	0
E10620	Type 1 diabetes mellitus with diabetic dermatitis	Diabetes	10	1
E10621	Type 1 diabetes mellitus with footulcer	Diabetes	10	1
E10622	Type 1 diabetes mellitus with other skin ulcer	Diabetes	10	1
E10628	Type 1 diabetes mellitus with other skin complications	Diabetes	10	1
E1063	Type 1 diabetes mellitus with oral complications	Diabetes	10	0
E10630	Type 1 diabetes mellitus with periodontal disease	Diabetes	10	1
E10638	Type 1 diabetes mellitus with other oral complications	Diabetes	10	1
E1064	Type 1 diabetes mellitus with hypoglycemia	Diabetes	10	0
E10641	Type 1 diabetes mellitus with hypoglycemia with coma	Diabetes	10	1
E10649	Type 1 diabetes mellitus with hypoglycemia without coma	Diabetes	10	1
E1065	Type 1 diabetes mellitus with hyperglycemia	Diabetes	10	1
E1069	Type 1 diabetes mellitus with other specified complication	Diabetes	10	1
E108	Type 1 diabetes mellitus with unspecified complications	Diabetes	10	1
E109	Type 1 diabetes mellitus without complications	Diabetes	10	1
E11	Type 2 diabetes mellitus	Diabetes	10	0
E110	Type 2 diabetes mellitus with hyperosmolarity	Diabetes	10	0
E1100	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diabetes	10	1
E1101	Type 2 diabetes mellitus with hyperosmolarity with coma	Diabetes	10	1
E112	Type 2 diabetes mellitus with kidney complications	Diabetes	10	0
E1121	Type 2 diabetes mellitus with diabetic nephropathy	Diabetes	10	1
E1122	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diabetes	10	1
E1129	Type 2 diabetes mellitus with other diabetic kidney complication	Diabetes	10	1
E113	Type 2 diabetes mellitus with ophthalmic complications	Diabetes	10	0
E1131	Type 2 diabetes mellitus with unspecified diabetic retinopathy	Diabetes	10	0
E11311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diabetes	10	1
E11319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diabetes	10	1
E1132	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy	Diabetes	10	0
E11321	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diabetes	10	1
E11329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1133	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy	Diabetes	10	0
E11331	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diabetes	10	1
E11339	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1134	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy	Diabetes	10	0

E11341	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diabetes	10	1
E11349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1135	Type 2 diabetes mellitus with proliferative diabetic retinopathy	Diabetes	10	0
E11351	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diabetes	10	1
E11359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1136	Type 2 diabetes mellitus with diabetic cataract	Diabetes	10	1
E1139	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Diabetes	10	1
E114	Type 2 diabetes mellitus with neurological complications	Diabetes	10	0
E1140	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	Diabetes	10	1
E1141	Type 2 diabetes mellitus with diabetic mononeuropathy	Diabetes	10	1
E1142	Type 2 diabetes mellitus with diabetic polyneuropathy	Diabetes	10	1
E1143	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diabetes	10	1
E1144	Type 2 diabetes mellitus with diabetic amyotrophy	Diabetes	10	1
E1149	Type 2 diabetes mellitus with other diabetic neurological complication	Diabetes	10	1
E115	Type 2 diabetes mellitus with circulatory complications	Diabetes	10	0
E1151	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diabetes	10	1
E1152	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diabetes	10	1
E1159	Type 2 diabetes mellitus with other circulatory complications	Diabetes	10	1
E116	Type 2 diabetes mellitus with other specified complications	Diabetes	10	0
E1161	Type 2 diabetes mellitus with diabetic arthropathy	Diabetes	10	0
E11610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	Diabetes	10	1
E11618	Type 2 diabetes mellitus with other diabetic arthropathy	Diabetes	10	1
E1162	Type 2 diabetes mellitus with skin complications	Diabetes	10	0
E11620	Type 2 diabetes mellitus with diabetic dermatitis	Diabetes	10	1
E11621	Type 2 diabetes mellitus with foot ulcer	Diabetes	10	1
E11622	Type 2 diabetes mellitus with other skin ulcer	Diabetes	10	1
E11628	Type 2 diabetes mellitus with other skin complications	Diabetes	10	1
E1163	Type 2 diabetes mellitus with oral complications	Diabetes	10	0
E11630	Type 2 diabetes mellitus with periodontal disease	Diabetes	10	1
E11638	Type 2 diabetes mellitus with other oral complications	Diabetes	10	1
E1164	Type 2 diabetes mellitus with hypoglycemia	Diabetes	10	0
E11641	Type 2 diabetes mellitus with hypoglycemia with coma	Diabetes	10	1
E11649	Type 2 diabetes mellitus with hypoglycemia without coma	Diabetes	10	1
E1165	Type 2 diabetes mellitus with hyperglycemia	Diabetes	10	1
E1169	Type 2 diabetes mellitus with other specified complication	Diabetes	10	1
E118	Type 2 diabetes mellitus with unspecified complications	Diabetes	10	1
E119	Type 2 diabetes mellitus without complications	Diabetes	10	1
E13	Other specified diabetes mellitus	Diabetes	10	0
E130	Other specified diabetes mellitus with hyperosmolarity	Diabetes	10	0
E1300	Other specified diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diabetes	10	1
E1301	Other specified diabetes mellitus with hyperosmolarity with coma	Diabetes	10	1
E131	Other specified diabetes mellitus with ketoacidosis	Diabetes	10	0
L 101	Other specified diabetes mellitus with ketoacidosis without coma	Diabetes	10	1

E1311	Other specified diabetes mellitus with ketoacidosis with coma	Diabetes	10	l 1
E132	Other specified diabetes mellitus with kidney complications	Diabetes	10	0
E1321	Other specified diabetes mellitus with diabetic nephropathy	Diabetes	10	1
E1322	Other specified diabetes mellitus with diabetic chronic kidney disease	Diabetes	10	1
E1329	Other specified diabetes mellitus with other diabetic kidney complication	Diabetes	10	1
E133	Other specified diabetes mellitus with ophthalmic complications	Diabetes	10	0
E1331	Other specified diabetes mellitus with unspecified diabetic retinopathy	Diabetes	10	0
E13311	Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diabetes	10	1
E13319	Other specified diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diabetes	10	1
E1332	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy	Diabetes	10	0
E13321	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diabetes	10	1
E13329	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1333	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy	Diabetes	10	0
E13331	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diabetes	10	1
E13339	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1334	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy	Diabetes	10	0
E13341	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diabetes	10	1
E13349	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1335	Other specified diabetes mellitus with proliferative diabetic retinopathy	Diabetes	10	0
E13351	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diabetes	10	1
E13359	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diabetes	10	1
E1336	Other specified diabetes mellitus with diabetic cataract	Diabetes	10	1
E1339	Other specified diabetes mellitus with other diabetic ophthalmic complication	Diabetes	10	1
E134	Other specified diabetes mellitus with neurological complications	Diabetes	10	0
E1340	Other specified diabetes mellitus with diabetic neuropathy, unspecified	Diabetes	10	1
E1341	Other specified diabetes mellitus with diabetic mononeuropathy	Diabetes	10	1
E1342	Other specified diabetes mellitus with diabetic polyneuropathy	Diabetes	10	1
E1343	Other specified diabetes mellitus with diabetic autonomic (poly)neuropathy	Diabetes	10	1
E1344	Other specified diabetes mellitus with diabetic amyotrophy	Diabetes	10	1
E1349	Other specified diabetes mellitus with other diabetic neurological complication	Diabetes	10	1
E135	Other specified diabetes mellitus with circulatory complications	Diabetes	10	0
E1351	Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diabetes	10	1
E1352	Other specified diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diabetes	10	1
E1359	Other specified diabetes mellitus with other circulatory complications	Diabetes	10	1

E136	Other specified diabetes mellitus with other specified complications	Diabetes	10	0
E1361	Other specified diabetes mellitus with diabetic arthropathy	Diabetes	10	0
E13610	Other specified diabetes mellitus with diabetic neuropathic arthropathy	Diabetes	10	1
E13618	Other specified diabetes mellitus with other diabetic arthropathy	Diabetes	10	1
E1362	Other specified diabetes mellitus with skin complications	Diabetes	10	0
E13620	Other specified diabetes mellitus with diabetic dermatitis	Diabetes	10	1
E13621	Other specified diabetes mellitus with foot ulcer	Diabetes	10	1
E13622	Other specified diabetes mellitus with other skin ulcer	Diabetes	10	1
E13628	Other specified diabetes mellitus with other skin complications	Diabetes	10	1
E1363	Other specified diabetes mellitus with oral complications	Diabetes	10	0
E13630	Other specified diabetes mellitus with periodontal disease	Diabetes	10	1
E13638	Other specified diabetes mellitus with other oral complications	Diabetes	10	1
E1364	Other specified diabetes mellitus with hypoglycemia	Diabetes	10	0
E13641	Other specified diabetes mellitus with hypoglycemia with coma	Diabetes	10	1
E13649	Other specified diabetes mellitus with hypoglycemia with out coma	Diabetes	10	1
E1365	Other specified diabetes mellitus with hyperglycemia without coma	Diabetes	10	1
E1369	Other specified diabetes mellitus with other specified complication	Diabetes	10	1
E138	Other specified diabetes mellitus with unspecified complications	Diabetes	10	1
	·			1
C240	Other specified diabetes mellitus without complications Pre-existing diabetes mellitus, type 1, in pregnancy, childbirth and the puerperium	Diabetes Diabetes	10	0
O2401		Diabetes	10	0
O2401	Pre-existing diabetes mellitus, type 1, in pregnancy Pre-existing diabetes mellitus, type 1, in pregnancy, first trimester	Diabetes	10	1
O24011	Pre-existing diabetes mellitus, type 1, in pregnancy, institutiester	Diabetes	10	1
O24013	Pre-existing diabetes mellitus, type 1, in pregnancy, third trimester	Diabetes	10	1
O24019	Pre-existing diabetes mellitus, type 1, in pregnancy, unspecified trimester	Diabetes	10	1
O2402	Pre-existing diabetes mellitus, type 1, in childbirth	Diabetes	10	1
O2403	Pre-existing diabetes mellitus, type 1, in the puerperium	Diabetes	10	1
O241	Pre-existing diabetes mellitus, type 2, in pregnancy, childbirth and the puerperium	Diabetes	10	0
O2411	Pre-existing diabetes mellitus, type 2, in pregnancy	Diabetes	10	0
O24111	Pre-existing diabetes mellitus, type 2, in pregnancy, first trimester	Diabetes	10	1
O24112	Pre-existing diabetes mellitus, type 2, in pregnancy, second trimester	Diabetes	10	1
O24113	Pre-existing diabetes mellitus, type 2, in pregnancy, third trimester	Diabetes	10	1
O24119	Pre-existing diabetes mellitus, type 2, in pregnancy, unspecified trimester	Diabetes	10	1
O2412	Pre-existing diabetes mellitus, type 2, in childbirth	Diabetes	10	1
O2413	Pre-existing diabetes mellitus, type 2, in the puerperium	Diabetes	10	1
O243	Unspecified pre-existing diabetes mellitus in pregnancy, childbirth and the puerperium	Diabetes	10	0
O2431	Unspecified pre-existing diabetes mellitus in pregnancy	Diabetes	10	0
O24311	Unspecified pre-existing diabetes mellitus in pregnancy, first trimester	Diabetes	10	1
O24312	Unspecified pre-existing diabetes mellitus in pregnancy, second trimester	Diabetes	10	1
O24313	Unspecified pre-existing diabetes mellitus in pregnancy, third trimester	Diabetes	10	1
O24319	Unspecified pre-existing diabetes mellitus in pregnancy, unspecified trimester	Diabetes	10	1
O2432	Unspecified pre-existing diabetes mellitus in childbirth	Diabetes	10	1
O2433	Unspecified pre-existing diabetes mellitus in the puerperium	Diabetes	10	1
O248	Other pre-existing diabetes mellitus in pregnancy, childbirth, and the puerperium	Diabetes	10	0
O2481	Other pre-existing diabetes mellitus in pregnancy	Diabetes	10	0
O24811	Other pre-existing diabetes mellitus in pregnancy, first trimester	Diabetes	10	1

O24812	Other pre-existing diabetes mellitus in pregnancy, second trimester	Diabetes	10	1
O24813	Other pre-existing diabetes mellitus in pregnancy, third trimester	Diabetes	10	1
O24819	Other pre-existing diabetes mellitus in pregnancy, unspecified trimester	Diabetes	10	1
O2482	Other pre-existing diabetes mellitus in childbirth	Diabetes	10	1
O2483	Other pre-existing diabetes mellitus in the puerperium	Diabetes	10	1
249	Secondary diabetes mellitus	Exclusion	9	0
2490	Secondary diabetes mellitus without mention of complication	Exclusion	9	0
24900	Secondary diabetes mellitus without mention of complication, not stated as uncontrolled, or unspecified	Exclusion	9	1
24901	Secondary diabetes mellitus without mention of complication, uncontrolled	Exclusion	9	1
2491	Secondary diabetes mellitus with ketoacidosis	Exclusion	9	0
24910	Secondary diabetes mellitus with ketoacidosis, not stated as uncontrolled, or unspecified	Exclusion	9	1
24911	Secondary diabetes mellitus with ketoacidosis, uncontrolled	Exclusion	9	1
2492	Secondary diabetes mellitus with hyperosmolarity	Exclusion	9	0
	Secondary diabetes mellitus with hyperosmolarity, not stated as			_
24920	uncontrolled, or unspecified	Exclusion	9	1
24921	Secondary diabetes mellitus with hyperosmolarity, uncontrolled	Exclusion	9	1
2493	Secondary diabetes mellitus with other coma	Exclusion	9	0
24930	Secondary diabetes mellitus with other coma, not stated as uncontrolled, or unspecified	Exclusion	9	1
24931	Secondary diabetes mellitus with other coma, uncontrolled	Exclusion	9	1
2494	Secondary diabetes mellitus with renal manifestations	Exclusion	9	0
24940	Secondary diabetes mellitus with renal manifestations, not stated as uncontrolled, or unspecified	Exclusion	9	1
24941	Secondary diabetes mellitus with renal manifestations, uncontrolled	Exclusion	9	1
2495	Secondary diabetes mellitus with ophthalmic manifestations	Exclusion	9	0
24950	Secondary diabetes mellitus with ophthalmic manifestations, not stated as uncontrolled, or unspecified	Exclusion	9	1
24951	Secondary diabetes mellitus with ophthalmic manifestations, uncontrolled	Exclusion	9	1
2496	Secondary diabetes mellitus with neurological manifestations	Exclusion	9	0
24960	Secondary diabetes mellitus with neurological manifestations, not stated as uncontrolled, or unspecified	Exclusion	9	1
24961	Secondary diabetes mellitus with neurological manifestations, uncontrolled	Exclusion	9	1
2497	Secondary diabetes mellitus with peripheral circulatory disorders	Exclusion	9	0
24970	Secondary diabetes mellitus with peripheral circulatory disorders, not stated as uncontrolled, or unspecified	Exclusion	9	1
24971	Secondary diabetes mellitus with peripheral circulatory disorders, uncontrolled	Exclusion	9	1
2498	Secondary diabetes mellitus with other specified manifestations	Exclusion	9	0
24980	Secondary diabetes mellitus with other specified manifestations, not stated as uncontrolled, or unspecified	Exclusion	9	1
24981	Secondary diabetes mellitus with other specified manifestations, uncontrolled	Exclusion	9	1
2499	Secondary diabetes mellitus with unspecified complication	Exclusion	9	0
24990	Secondary diabetes mellitus with unspecified complication, not stated as uncontrolled, or unspecified	Exclusion	9	1
24991	Secondary diabetes mellitus with unspecified complication, uncontrolled	Exclusion	9	1

2518	Other specified disorders of pancreatic internal secretion	Exclusion	9	1
6488	Abnormal glucose tolerance of mother, complicating pregnancy, childbirth, or the puerperium	Exclusion	9	0
64880	Abnormal glucose tolerance of mother, unspecified as to episode of care or not applicable	Exclusion	9	1
64881	Abnormal glucose tolerance of mother, delivered, with or without mention of antepartum condition	Exclusion	9	1
64882	Abnormal glucose tolerance of mother, delivered, with mention of postpartum complication	Exclusion	9	1
64883	Abnormal glucose tolerance of mother, antepartum condition or complication	Exclusion	9	1
64884	Abnormal glucose tolerance of mother, postpartum condition or complication	Exclusion	9	1
9620	Poisoning by adrenal cortical steroids	Exclusion	9	1
E08	Diabetes mellitus due to underlying condition	Exclusion	10	0
E080	Diabetes mellitus due to underlying condition with hyperosmolarity	Exclusion	10	0
E0800	Diabetes mellitus due to underlying condition with hyperosmolarity	Exclusion	10	1
	without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Exclusion	10	'
E0801	Diabetes mellitus due to underlying condition with hyperosmolarity with coma	Exclusion	10	1
E081	Diabetes mellitus due to underlying condition with ketoacidosis	Exclusion	10	0
E0810	Diabetes mellitus due to underlying condition with ketoacidosis without coma	Exclusion	10	1
E0811	Diabetes mellitus due to underlying condition with ketoacidosis with coma	Exclusion	10	1
E082	Diabetes mellitus due to underlying condition with kidney complications	Exclusion	10	0
E0821	Diabetes mellitus due to underlying condition with diabetic nephropathy	Exclusion	10	1
E0822	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Exclusion	10	1
E0829	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Exclusion	10	1
E083	Diabetes mellitus due to underlying condition with ophthalmic complications	Exclusion	10	0
E0831	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy	Exclusion	10	0
E08311	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy with macular edema	Exclusion	10	1
E08319	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy without macular edema	Exclusion	10	1
E0832	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy	Exclusion	10	0
E08321	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema	Exclusion	10	1
E08329	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema	Exclusion	10	1
E0833	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy	Exclusion	10	0
E08331	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema	Exclusion	10	1
E08339	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema	Exclusion	10	1
E0834	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy	Exclusion	10	0

E08341	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema	Exclusion	10	1
E08349	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema	Exclusion	10	1
E0835	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy	Exclusion	10	0
E08351	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema	Exclusion	10	1
E08359	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema	Exclusion	10	1
E0836	Diabetes mellitus due to underlying condition with diabetic cataract	Exclusion	10	1
E0839	Diabetes mellitus due to underlying condition with other diabetic ophthalmic complication	Exclusion	10	1
E084	Diabetes mellitus due to underlying condition with neurological complications	Exclusion	10	0
E0840	Diabetes mellitus due to underlying condition with diabetic neuropathy, unspecified	Exclusion	10	1
E0841	Diabetes mellitus due to underlying condition with diabetic mononeuropathy	Exclusion	10	1
E0842	Diabetes mellitus due to underlying condition with diabetic polyneuropathy	Exclusion	10	1
E0843	Diabetes mellitus due to underlying condition with diabetic autonomic (poly)neuropathy	Exclusion	10	1
E0844	Diabetes mellitus due to underlying condition with diabetic amyotrophy	Exclusion	10	1
E0849	Diabetes mellitus due to underlying condition with other diabetic neurological complication	Exclusion	10	1
E085	Diabetes mellitus due to underlying condition with circulatory complications	Exclusion	10	0
E0851	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy without gangrene	Exclusion	10	1
E0852	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy with gangrene	Exclusion	10	1
E0859	Diabetes mellitus due to underlying condition with other circulatory complications	Exclusion	10	1
E086	Diabetes mellitus due to underlying condition with other specified complications	Exclusion	10	0
E0861	Diabetes mellitus due to underlying condition with diabetic arthropathy	Exclusion	10	0
E08610	Diabetes mellitus due to underlying condition with diabetic neuropathic arthropathy	Exclusion	10	1
E08618	Diabetes mellitus due to underlying condition with other diabetic arthropathy	Exclusion	10	1
E0862	Diabetes mellitus due to underlying condition with skin complications	Exclusion	10	0
E08620	Diabetes mellitus due to underlying condition with diabetic dermatitis	Exclusion	10	1
E08621	Diabetes mellitus due to underlying condition with foot ulcer	Exclusion	10	1
E08622	Diabetes mellitus due to underlying condition with other skin ulcer	Exclusion	10	1
E08628	Diabetes mellitus due to underlying condition with other skin complications	Exclusion	10	1
E0863	Diabetes mellitus due to underlying condition with oral complications	Exclusion	10	0
E08630	Diabetes mellitus due to underlying condition with periodontal disease	Exclusion	10	1
E08638	Diabetes mellitus due to underlying condition with other oral complications	Exclusion	10	1

E0864	Diabetes mellitus due to underlying condition with hypoglycemia	Exclusion	10	0
E08641	Diabetes mellitus due to underlying condition with hypoglycemia with coma	Exclusion	10	1
E08649	Diabetes mellitus due to underlying condition with hypoglycemia without coma	Exclusion	10	1
E0865	Diabetes mellitus due to underlying condition with hyperglycemia	Exclusion	10	1
E0869	Diabetes mellitus due to underlying condition with other specified complication	Exclusion	10	1
E088	Diabetes mellitus due to underlying condition with unspecified complications	Exclusion	10	1
E089	Diabetes mellitus due to underlying condition without complications	Exclusion	10	1
E09	Drug or chemical induced diabetes mellitus	Exclusion	10	0
E090	Drug or chemical induced diabetes mellitus with hyperosmolarity	Exclusion	10	0
E0900	Drug or chemical induced diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Exclusion	10	1
E0901	Drug or chemical induced diabetes mellitus with hyperosmolarity with coma	Exclusion	10	1
E091	Drug or chemical induced diabetes mellitus with ketoacidosis	Exclusion	10	0
E0910	Drug or chemical induced diabetes mellitus with ketoacidosis without coma	Exclusion	10	1
E0911	Drug or chemical induced diabetes mellitus with ketoacidosis with coma	Exclusion	10	1
E092	Drug or chemical induced diabetes mellitus with kidney complications	Exclusion	10	0
E0921	Drug or chemical induced diabetes mellitus with diabetic nephropathy	Exclusion	10	1
E0922	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease	Exclusion	10	1
E0929	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Exclusion	10	1
E093	Drug or chemical induced diabetes mellitus with ophthalmic complications	Exclusion	10	0
E0931	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy	Exclusion	10	0
E09311	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy with macular edema	Exclusion	10	1
E09319	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy without macular edema	Exclusion	10	1
E0932	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy	Exclusion	10	0
E09321	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Exclusion	10	1
E09329	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Exclusion	10	1
E0933	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy	Exclusion	10	0
E09331	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Exclusion	10	1
E09339	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Exclusion	10	1
E0934	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy	Exclusion	10	0
E09341	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Exclusion	10	1
E09349	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Exclusion	10	1

E0935	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy	Exclusion	10	0
E09351	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema	Exclusion	10	1
E09359	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema	Exclusion	10	1
E0936	Drug or chemical induced diabetes mellitus with diabetic cataract	Exclusion	10	1
E0939	Drug or chemical induced diabetes mellitus with other diabetic ophthalmic complication	Exclusion	10	1
E094	Drug or chemical induced diabetes mellitus with neurological complications	Exclusion	10	0
E0940	Drug or chemical induced diabetes mellitus with neurological complications with diabetic neuropathy, unspecified	Exclusion	10	1
E0941	Drug or chemical induced diabetes mellitus with neurological complications with diabetic mononeuropathy	Exclusion	10	1
E0942	Drug or chemical induced diabetes mellitus with neurological complications with diabetic polyneuropathy	Exclusion	10	1
E0943	Drug or chemical induced diabetes mellitus with neurological complications with diabetic autonomic (poly)neuropathy	Exclusion	10	1
E0944	Drug or chemical induced diabetes mellitus with neurological complications with diabetic amyotrophy	Exclusion	10	1
E0949	Drug or chemical induced diabetes mellitus with neurological complications with other diabetic neurological complication	Exclusion	10	1
E095	Drug or chemical induced diabetes mellitus with circulatory complications	Exclusion	10	0
E0951	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy without gangrene	Exclusion	10	1
E0952	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy with gangrene	Exclusion	10	1
E0959	Drug or chemical induced diabetes mellitus with other circulatory complications	Exclusion	10	1
E096	Drug or chemical induced diabetes mellitus with other specified complications	Exclusion	10	0
E0961	Drug or chemical induced diabetes mellitus with diabetic arthropathy	Exclusion	10	0
E09610	Drug or chemical induced diabetes mellitus with diabetic neuropathic arthropathy	Exclusion	10	1
E09618	Drug or chemical induced diabetes mellitus with other diabetic arthropathy	Exclusion	10	1
E0962	Drug or chemical induced diabetes mellitus with skin complications	Exclusion	10	0
E09620	Drug or chemical induced diabetes mellitus with diabetic dermatitis	Exclusion	10	1
E09621	Drug or chemical induced diabetes mellitus with foot ulcer	Exclusion	10	1
E09622	Drug or chemical induced diabetes mellitus with other skin ulcer	Exclusion	10	1
E09628	Drug or chemical induced diabetes mellitus with other skin complications	Exclusion	10	1
E0963	Drug or chemical induced diabetes mellitus with oral complications	Exclusion	10	0
E09630	Drug or chemical induced diabetes mellitus with periodontal disease	Exclusion	10	1
E09638	Drug or chemical induced diabetes mellitus with other oral complications	Exclusion	10	1
E0964	Drug or chemical induced diabetes mellitus with hypoglycemia	Exclusion	10	0
E09641	Drug or chemical induced diabetes mellitus with hypoglycemia with coma	Exclusion	10	1
E09649	Drug or chemical induced diabetes mellitus with hypoglycemia without coma	Exclusion	10	1
E0965	Drug or chemical induced diabetes mellitus with hyperglycemia	Exclusion	10	1

E0969	Drug or chemical induced diabetes mellitus with other specified complication	Exclusion	10	1
E098	Drug or chemical induced diabetes mellitus with unspecified complications	Exclusion	10	1
E099	Drug or chemical induced diabetes mellitus without complications	Exclusion	10	1
O244	Gestational diabetes mellitus	Exclusion	10	0
O2441	Gestational diabetes mellitus in pregnancy	Exclusion	10	0
O24410	Gestational diabetes mellitus in pregnancy, diet controlled	Exclusion	10	1
O24414	Gestational diabetes mellitus in pregnancy, insulin controlled	Exclusion	10	1
O24419	Gestational diabetes mellitus in pregnancy, unspecified control	Exclusion	10	1
O2442	Gestational diabetes mellitus in childbirth	Exclusion	10	0
O24420	Gestational diabetes mellitus in childbirth, diet controlled	Exclusion	10	1
O24424	Gestational diabetes mellitus in childbirth, insulin controlled	Exclusion	10	1
O24429	Gestational diabetes mellitus in childbirth, unspecified control	Exclusion	10	1
O2443	Gestational diabetes mellitus in the puerperium	Exclusion	10	0
O24430	Gestational diabetes mellitus in the puerperium, diet controlled	Exclusion	10	1
O24434	Gestational diabetes mellitus in the puerperium, insulin controlled	Exclusion	10	1
O24439	Gestational diabetes mellitus in the puerperium, unspecified control	Exclusion	10	1
O249	Unspecified diabetes mellitus in pregnancy, childbirth and the puerperium	Exclusion	10	0
O2491	Unspecified diabetes mellitus in pregnancy	Exclusion	10	0
O24911	Unspecified diabetes mellitus in pregnancy, first trimester	Exclusion	10	1
O24912	Unspecified diabetes mellitus in pregnancy, second trimester	Exclusion	10	1
O24913	Unspecified diabetes mellitus in pregnancy, third trimester	Exclusion	10	1
O24919	Unspecified diabetes mellitus in pregnancy, unspecified trimester	Exclusion	10	1
O2492	Unspecified diabetes mellitus in childbirth	Exclusion	10	1
O2493	Unspecified diabetes mellitus in the puerperium	Exclusion	10	1

Table 7: Antidiabetic Medications (as of Jan., 2016)

Antid	Antidiabetic Drugs				
Acarbose	Insulin Glulisine				
Albiglutide	Insulin Lispro (Human)				
Alogliptin Benzoate	Insulin Lispro Prot & Lispro				
Alogliptin-Metformin HCI	Insulin NPH Human (Isophane)				
Alogliptin-Pioglitazone	Insulin NPH Isophane & Regular				
Bromocriptine Mesylate	Insulin Regular Human				
Canagliflozin	Linagliptin				
Canagliflozin-Metformin HCl	Linagliptin-Metformin HCI				
ChlorproPAMIDE	Liraglutide				
Dapagliflozin Propanediol	Mifepristone				
Dapagliflozin-Metformin HCl	Miglitol				
Dulaglutide	Nateglinide				
Empagliflozin	Pioglitazone HCI				

Empagliflozin-Linagliptin	Pioglitazone HCI-Glimepiride
Exenatide	Pioglitazone HCI-Metformin HCI
Glimepiride	Pramlintide Acetate
GlipiZIDE	Repaglinide
GlipiZIDE-MetFORMIN HCI	Rosiglitazone Maleate
GlyBURIDE	Rosiglitazone-Metformin
GlyBURIDE Micronized	Saxagliptin HCI
GlyBURIDE-MetFORMIN	Saxagliptin-Metformin
Insulin Aspart	SitaGLIPtin Phosphate
Insulin Aspart Prot & Aspart	SitaGLIPtin-MetFORMIN HCI
Insulin Detemir	Sitagliptin-Simvastatin
Insulin Glargine	

Table 8: Diagnosis codes for Schizophrenia

Diagnosis code	Diagnosis label	ICD version	Diagnosis code	Diagnosis label	ICD version
295	Schizophrenic disorders	9	2956	Residual type schizophrenic disorders	9
2950	Simple type schizophrenia	9	29560	Schizophrenic disorders, residual type, unspecified	9
29500	Simple type schizophrenia, unspecified	9	29561	Schizophrenic disorders, residual type, subchronic	9
29501	Simple type schizophrenia, subchronic	9	29562	Schizophrenic disorders, residual type, chronic	9
29502	Simple type schizophrenia, chronic	9	29563	Schizophrenic disorders, residual type, subchronic with acute exacerbation	9
29503	Simple type schizophrenia, subchronic with acute exacerbation	9	29564	Schizophrenic disorders, residual type, chronic with acute exacerbation	9
29504	Simple type schizophrenia, chronic with acute exacerbation	9	29565	Schizophrenic disorders, residual type, in remission	9
29505	Simple type schizophrenia, in remission	9	2957	Schizoaffective disorder	9
2951	Disorganized type schizophrenia	9	29570	Schizoaffective disorder, unspecified	9
29510	Disorganized type schizophrenia, unspecified	9	29571	Schizoaffective disorder, subchronic	9
29511	Disorganized type schizophrenia, subchronic	9	29572	Schizoaffective disorder, chronic	9
29512	Disorganized type schizophrenia, chronic	9	29573	Schizoaffective disorder, subchronic with acute exacerbation	9
29513	Disorganized type schizophrenia, subchronic with acute exacerbation	9	29574	Schizoaffective disorder, chronic with acute exacerbation	9
29514	Disorganized type schizophrenia, chronic with acute exacerbation	9	29575	Schizoaffective disorder, in remission	9
29515	Disorganized type schizophrenia, in remission	9	2958	Other specified types of schizophrenia	9
2952	Catatonic type schizophrenia	9	29580	Other specified types of schizophrenia, unspecified	9
29520	Catatonic type schizophrenia, unspecified	9	29581	Other specified types of schizophrenia, subchronic	9
29521	Catatonic type schizophrenia, subchronic	9	29582	Other specified types of schizophrenia, chronic	9
29522	Catatonic type schizophrenia, chronic	9	29583	Other specified types of schizophrenia, subchronic with acute exacerbation	9
29523	Catatonic type schizophrenia, subchronic with acute exacerbation	9	29584	Other specified types of schizophrenia, chronic with acute exacerbation	9

29524	Catatonic type schizophrenia, chronic with acute exacerbation	9	29585	Other specified types of schizophrenia, in remission	9
29525	Catatonic type schizophrenia, in remission	9	2959	Unspecified schizophrenia	9
2953	Paranoid type schizophrenia	9	29590	Unspecified schizophrenia, unspecified	9
29530	Paranoid type schizophrenia, unspecified	9	29591	Unspecified schizophrenia, subchronic	9
29531	Paranoid type schizophrenia, subchronic	9	29592	Unspecified schizophrenia, chronic	9
29532	Paranoid type schizophrenia, chronic	9	29593	Unspecified schizophrenia, subchronic with acute exacerbation	9
29533	Paranoid type schizophrenia, subchronic with acute exacerbation	9	29594	Unspecified schizophrenia, chronic with acute exacerbation	9
29534	Paranoid type schizophrenia, chronic with acute exacerbation	9	29595	Unspecified schizophrenia, in remission	9
29535	Paranoid type schizophrenia, in remission	9	F20	Schizophrenia	10
2954	Schizophreniform disorder	9	F200	Paranoid schizophrenia	10
29540	Schizophreniform disorder, unspecified	9	F201	Disorganized schizophrenia	10
29541	Schizophreniform disorder, subchronic	9	F202	Catatonic schizophrenia	10
29542	Schizophreniform disorder, chronic	9	F203	Undifferentiated schizophrenia	10
29543	Schizophreniform disorder, subchronic with acute exacerbation	9	F205	Residual schizophrenia	10
29544	Schizophreniform disorder, chronic with acute exacerbation	9	F208	Other schizophrenia	10
29545	Schizophreniform disorder, in remission	9	F2081	Schizophreniform disorder	10
2955	Latent schizophrenia	9	F2089	Other schizophrenia	10
29550	Latent schizophrenia, unspecified	9	F209	Schizophrenia, unspecified	10
29551	Latent schizophrenia, subchronic	9	F250	Schizoaffective disorder, bipolar type	10
29552	Latent schizophrenia, chronic	9	F251	Schizoaffective disorder, depressive type	10
29553	Latent schizophrenia, subchronic with acute exacerbation	9	F258	Other schizoaffective disorders	10
29554	Latent schizophrenia, chronic with acute exacerbation	9	F259	Schizoaffective disorder, unspecified	10
29555	Latent schizophrenia, in remission	9			

Table 9: Diagnosis codes for Bipolar

Diagnosis code	Diagnosis label	ICD version	Diagnosis code	Diagnosis label	ICD version
296	Episodic mood disorders	9	F301	Manic episode without psychotic symptoms	10
2960	Bipolar i disorder, single manic episode	9	F3010	Manic episode without psychotic symptoms, unspecified	10
29600	Bipolar I disorder, single manic episode, unspecified	9	F3011	Manic episode without psychotic symptoms, mild	10
29601	Bipolar I disorder, single manic episode, mild	9	F3012	Manic episode without psychotic symptoms, moderate	10
29602	Bipolar I disorder, single manic episode, moderate	9	F3013	Manic episode, severe, without psychotic symptoms	10
29603	Bipolar I disorder, single manic episode, severe, without mention of psychotic behavior	9	F302	Manic episode, severe with psychotic symptoms	10
29604	Bipolar I disorder, single manic episode, severe, specified as with psychotic behavior	9	F303	Manic episode in partial remission	10
29605	Bipolar I disorder, single manic episode, in partial or unspecified remission	9	F304	Manic episode in full remission	10
29606	Bipolar I disorder, single manic episode, in full remission	9	F308	Other manic episodes	10
2961	Manic disorder, recurrent episode	9	F309	Manic episode, unspecified	10
29610	Manic affective disorder, recurrent episode, unspecified	9	F31	Bipolar disorder	10
29611	Manic affective disorder, recurrent episode, mild	9	F310	Bipolar disorder, current episode hypomanic	10
29612	Manic affective disorder, recurrent episode, moderate	9	F311	Bipolar disorder, current episode manic without psychotic features	10
29613	Manic affective disorder, recurrent episode, severe, without mention of psychotic behavior	9	F3110	Bipolar disorder, current episode manic without psychotic features, unspecified	10
29614	Manic affective disorder, recurrent episode, severe, specified as with psychotic behavior	9	F3111	Bipolar disorder, current episode manic without psychotic features, mild	10
29615	Manic affective disorder, recurrent episode, in partial or unspecified remission	9	F3112	Bipolar disorder, current episode manic without psychotic features, moderate	10
29616	Manic affective disorder, recurrent episode, in full remission	9	F3113	Bipolar disorder, current episode manic without psychotic features, severe	10
2964	Bipolar i disorder, most recent episode (or current) manic	9	F312	Bipolar disorder, current episode manic severe with psychotic features	10

29640	Bipolar I disorder, most recent episode (or current) manic, unspecified	9	F313	Bipolar disorder, current episode depressed, mild or moderate severity	10
29641	Bipolar I disorder, most recent episode (or current) manic, mild	9	F3130	Bipolar disorder, current episode depressed, mild or moderate severity, unspecified	10
29642	Bipolar I disorder, most recent episode (or current) manic, moderate	9	F3131	Bipolar disorder, current episode depressed, mild	10
29643	Bipolar I disorder, most recent episode (or current) manic, severe, without mention of psychotic behavior	9	F3132	Bipolar disorder, current episode depressed, moderate	10
29644	Bipolar I disorder, most recent episode (or current) manic, severe, specified as with psychotic behavior	9	F314	Bipolar disorder, current episode depressed, severe, without psychotic features	10
29645	Bipolar I disorder, most recent episode (or current) manic, in partial or unspecified remission	9	F315	Bipolar disorder, current episode depressed, severe, with psychotic features	10
29646	Bipolar I disorder, most recent episode (or current) manic, in full remission	9	F3160	Bipolar disorder, current episode mixed, unspecified	10
2965	Bipolari disorder, most recent episode (or current) depressed	9	F3161	Bipolar disorder, current episode mixed, mild	10
29650	Bipolar I disorder, most recent episode (or current) depressed, unspecified	9	F3162	Bipolar disorder, current episode mixed, moderate	10
29651	Bipolar I disorder, most recent episode (or current) depressed, mild	9	F3163	Bipolar disorder, current episode mixed, severe, without psychotic features	10
29652	Bipolar I disorder, most recent episode (or current) depressed, moderate	9	F3164	Bipolar disorder, current episode mixed, severe, with psychotic features	10
29653	Bipolar I disorder, most recent episode (or current) depressed, severe, without mention of psychotic behavior	9	F317	Bipolar disorder, currently in remission	10
29654	Bipolar I disorder, most recent episode (or current) depressed, severe, specified as with psychotic behavior	9	F3170	Bipolar disorder, currently in remission, most recent episode unspecified	10
29655	Bipolar I disorder, most recent episode (or current) depressed, in partial or unspecified remission	9	F3171	Bipolar disorder, in partial remission, most recent episode hypomanic	10
29656	Bipolar I disorder, most recent episode (or current) depressed, in full remission	9	F3172	Bipolar disorder, in full remission, most recent episode hypomanic	10
2966	Bipolari disorder, most recent episode (or current) mixed	9	F3173	Bipolar disorder, in partial remission, most recent episode manic	10

29660	Bipolar I disorder, most recent episode (or current) mixed, unspecified	9	F3174	Bipolar disorder, in full remission, most recent episode manic	10
29661	Bipolar I disorder, most recent episode (or current) mixed, mild	9	F3175	Bipolar disorder, in partial remission, most recent episode depressed	10
29662	Bipolar I disorder, most recent episode (or current) mixed, moderate	9	F3176	Bipolar disorder, in full remission, most recent episode depressed	10
29663	Bipolar I disorder, most recent episode (or current) mixed, severe, without mention of psychotic behavior	9	F3177	Bipolar disorder, in partial remission, most recent episode mixed	10
29664	Bipolar I disorder, most recent episode (or current) mixed, severe, specified as with psychotic behavior	9	F3178	Bipolar disorder, in full remission, most recent episode mixed	10
29665	Bipolar I disorder, most recent episode (or current) mixed, in partial or unspecified remission	9	F318	Other bipolar disorders	10
29666	Bipolar I disorder, most recent episode (or current) mixed, in full remission	9	F3181	Bipolar II disorder	10
2967	Bipolar I disorder, most recent episode (or current) unspecified	9	F3189	Other bipolar disorder	10
F30	Manic episode	10	F319	Bipolar disorder, unspecified	10

Table 10: Diagnosis codes for Depression

Diagnosis code	Diagnosis label	ICD version
29620	Major depressive affective disorder, single episode, unspecified	
29621	Major depressive affective disorder, single episode, mild	9
29622	Major depressive affective disorder, single episode, moderate	9
29623	Major depressive affective disorder, single episode, severe, without mention of psychotic behavior	9
29624	Major depressive affective disorder, single episode, severe, specified as with psychotic behavior	9
29630	Major depressive affective disorder, recurrent episode, unspecified	9
29631	Major depressive affective disorder, recurrent episode, mild	9
29632	Major depressive affective disorder, recurrent episode, moderate	9
29633	Major depressive affective disorder, recurrent episode, severe, without mention of psychotic behavior	9
29634	Major depressive affective disorder, recurrent episode, severe, specified as with psychotic behavior	9
29635	Major depressive affective disorder, recurrent episode, in partial or unspecified remission	9

29625	Major depressive affective disorder, single episode, in partial or unspecified remission	9
2980	Depressive type psychosis	9
311	Depressive disorder, not elsewhere classified	9
F32	Major depressive disorder, single episode	10
F320	Major depressive disorder, single episode, mild	10
F321	Major depressive disorder, single episode, moderate	10
F322	Major depressive disorder, single episode, severe without psychotic features	10
F323	Major depressive disorder, single episode, severe with psychotic features	10
F324	Major depressive disorder, single episode, in partial remission	10
F325	Major depressive disorder, single episode, in full remission	10
F328	Other depressive episodes	10
F329	Major depressive disorder, single episode, unspecified	10
F33	Major depressive disorder, recurrent	10
F330	Major depressive disorder, recurrent, mild	10
F331	Major depressive disorder, recurrent, moderate	10
F332	Major depressive disorder, recurrent severe without psychotic features	10
F333	Major depressive disorder, recurrent, severe with psychotic symptoms	10
F334	Major depressive disorder, recurrent, in remission	10
F3340	Major depressive disorder, recurrent, in remission, unspecified	10
F3341	Major depressive disorder, recurrent, in partial remission	10
F3342	Major depressive disorder, recurrent, in full remission	10
F338	Other recurrent depressive disorders	10
F339	Major depressive disorder, recurrent, unspecified	10